

What is claimed:

1. A Lantibiotic Display Peptide comprising a chimeric polypeptide comprising a lantibiotic peptide, an amino acid spacer attached to the C-terminus of the lantibiotic peptide, and a subtilin leader segment attached to the spacer.
2. The Lantibiotic Display Peptide of claim 1, wherein the lantibiotic peptide is obtained from *Bacillus subtilis*.
3. The Lantibiotic Display Peptide of claim 2, wherein the lantibiotic peptide is obtained from *Bacillus subtilis* strain 168.
4. The Lantibiotic Display Peptide of claim 1 or 2, wherein the lantibiotic peptide is sublancin 168 comprising amino acid residues 1-38 of SEQ ID No. 2.
5. The Lantibiotic Display Peptide of claim 1, wherein the spacer comprises from 15-25 amino acid residues.
6. The Lantibiotic Display Peptide of claim 1, wherein the spacer comprises about 20 amino acid residues.
7. The Lantibiotic Display Peptide of claim 1, wherein the subtilin leader segment comprises amino acid residues 58-81 of SEQ ID No. 2.
8. The Lantibiotic Display Peptide of claim 1, wherein the subtilin leader segment comprises amino acid residues 68-81 of SEQ ID No. 2.
9. The Lantibiotic Display Peptide of claim 1, wherein the subtilin leader segment comprises amino acid residues 78-81 of SEQ ID No. 2.

d) identifying the cell expressing the Lantibody Display Peptide by measuring binding of the Lantibody Display Peptide to a target molecule.

16. The method of claim 15, wherein the host cell is *Bacillus subtilis* strain 168.

17. The method of claim 15, wherein the target molecule comprises a nucleophilic group.

18. The method of claim 17, wherein the nucleophilic group is located within an antigen, an antibody, a virus particle, a bacterial cell, a bacterial spore, a vegetative bacterial cell, or a protein or peptide on any of the aforementioned molecules.

19. A method for identifying a Lantibody Display Peptide expressed on a host cell surface having the ability to bind to a target molecule, comprising providing a host cell expressing a Lantibody Display Peptide on the host cell surface, mixing the host cell with a target molecule, detecting binding of the target molecule to the Lantibody Display Peptide with an antibody, isolating the host cell by a means recognizing the antibody, and purifying and sequencing the Lantibody Display Peptide expressed on the host cell surface.

20. A kit for identifying a target molecule for a Lantibody Display Peptide comprising
a) a cell expressing the Lantibody Display Peptide in its cell surface;
b) an anti-lantibody antibody; and
c) a means for immunoadsorption.